John & Kernick FORM P1	REPUBLIC OF SOUTH AFRICA PATENTS ACT, 1978 APPLICATION FOR A PATENT AND ACKNOWLEDGEMENT OF RECEIPT Section 30(1) - Regulation 39	BEAGINGS BEAGINGS							
The grant of a Patent is hereby requested by the undermentioned applicant(s) on the present application filed in duplicate									
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937897	25th October, 1993	P 11991 ZA/MVS							
Full Name(s) of applicants: WOOD PROJECTS (PROPRIETARY) LIMITED. A legal body organised and existed under the laws of the Republic of Ciskei.									
Address(es) of applicant(s) 18 Amatola Business Village, Lennox Sebe Drive, Bisho, Republic of Ciskei.									
Title of Invention PACKAGING BAGS MADE OF NETTING MATERIAL.									
priority claimed is - ZA 93/1060 This application is for a Patent of Add This application is a fresh application This application is accompanied by: 1a A single copy of a provisional sp 1b Two copies of a complete specification XX 2a Informal drawings of 2 sheets 2b Formal drawings of sheets XX 3. Publication particulars and abstract	in terms of S 37 and based on application no. ecification of pages cation of 13 pages at (form P8 in duplicate) wings for the abstract inventors) or other evidence of title documents) documents) eccification of S.A Patent Application ey on form P3 4 P9	24 01 21 01 21 01 21 01 93/1060							
74 Address for Service: JOHN & KERN	IICK, PRETORIA.	REGISTRAR OF PATELTS, DESIGNS,							
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John & Kernick FORM P7

REPUBLIC OF SOUTH AFRICA-PATENTS ACT, 1978

COMPLETE SPECIFICATION

(Section 30(1) - Regulation 28)

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<u>PACKAGING BAGS MADE OF NETTING MATERIAL</u>

FIELD OF THE INVENTION

THIS INVENTION relates to packaging bags made of netting material, in particular, but not exclusively, packaging bags of the type used for marketing agricultural produce or the like.

Still more particularly the invention relates to such packaging bags wherein handles are provided whereby the bag can be carried.

/BACKGROUND TO

BACKGROUND TO THE INVENTION

Packaging bags made of netting material are widely used for the purpose of marketing agricultural produce, the netting material having the advantages of allowing the produce to breathe adequately; of being light in weight; and of being generally strong relative to the weight of material used to form the bag.

Netting material used for the purpose of producing such bags may be of natural fibres, but more particularly, may be made of plastics material such as high or low density polyethylene or polypropylene material which can be moulded to a netting configuration, woven, or knitted.

In order to provide handles to such a packaging bag, preformed plastics handles can be welded to the upper end of the bag. This method of attaching a handle to the bag does have the disadvantage that the weight is carried in localised positions relative to the netting and high stresses can develop in such localised regions of the netting.

/Another disadvantage

Another disadvantage of existing types of such packaging bags are that attachment of labels to the bags for the purpose of identifying product within the bags is either not particularly effective or inconvenient.

It is the object of this invention to provide a packaging bag made of netting material which will have certain advantages over those presently available.

SUMMARY OF THE INVENTION

In accordance with this invention there is provided a packaging bag made of netting material and wherein a pair of handles are formed at the end thereof having an access aperture, the handles being characterised in that they are defined by a region of sheet material extending, in the operative orientation, upwardly from the access opening at the upper end of the bag and whereof integral and other portions of the sheet material are secured to the netting material on each side of the bag to extend down at least a substantial

/portion of

portion of the height of the bag at each side thereof.

Further features of the invention provide for the sheet material to extend down substantially the entire height of the bag on each side thereof; for the sheet material to either assume the form of a strap in which case each side of the bag has two parallel straps spaced secured thereto alternatively, to assume the form of a relatively wide sheet in which case the sheet material is of narrower width than the bag and the handles are defined in consequence of cut-outs in the upper end of the sheet material; for, in the latter event, two portions of sheet material to be positioned one on each side of the bag, the two sheets being either integral or joined at the end thereof remote from the access aperture; for the sheet material to be a plastics film or strap material secured to the netting of the bag along lines extending along the height of bag; for the netting material to be a plastics material in which case the sheet material can be secured thereto by fusion or welding; and for the access aperture end of the

bag to be provided with a drawstring for closing the bag.

Conveniently the netting material is a moulded netting material made of a mixture of high and low density polyethylene and the sheet material is a thin high density polyethylene film or strapping.

In order that the invention may be more fully understood, two embodiments thereof will now be described with reference to the accompanying drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

In the accompanying drawings each of Figures 1 and 2 is an isometric view of a different packaging bag according to the invention.

DETAILED DESCRIPTION WITH REFERENCE TO THE DRAWING

In the embodiment of the invention illustrated in Figure 1, a conventional packaging bag 1 is made of a length of tubular moulded netting material closed

/at one

at one end 2 by doubling it over and stitching it.

Another proposal is to weld the bottom closed. The sides may also be gussetted at the bottom, if required.

The netting is, in this case, made of a mixture of high and low density polyethylene but could also be made of any other suitable material.

A pair of handles 3 are provided at the operatively upper end 4 of the bag which has the access opening 5. The handles 3 are formed by extended zones of two sheets 6 of material which is conveniently a thin, high density polyethylene material. The sheets 6 of material extend, in this case, up the entire height of the bag from the bottom 7 to the top of the bag and are welded to each side of the netting by substantially continuous welds 8 extending substantially up the entire height of the bag.

The sheets 6 of plastic film material are appreciably narrower than the bag so that large regions 9 of netting are left on each side of the

/sheet to

sheet to ensure that adequate circulation of air, and breathing of the product packaged therein, is maintained. Also, any required apertures may be cut out of the sheet.

For convenience of manufacture, the two sheets of material can be welded together at top and bottom 10 and 7 prior to being secured to the packaging bag. The two spaced handles are formed by providing appropriate cut-outs in the end region of the sheets which extends beyond the end of the bag.

Securing of the sheets to the packaging bag can simply be achieved with the use of a welding machine having electrodes of adequate length to form the welds 8. Welding is carried out from opposite sides of the bag with the sheets of material in place thereon. It is has been found that effective welding is achieved in this way thereby securing both sheets to the two opposite sides of the netting bag simultaneously.

Finally, the bag is provided with a drawstring 12 for closing the access aperture 5.

It has been found that with the sheets 6 extending over an appreciable area of the netting bag, and with the welds 8 being of appreciable length, the load carrying capacity of the handles is more than adequate for the purposes of carrying the bag once full of produce. Also the sheets of material can be used to receive printed information as to the identity or otherwise or the product packaged in the bag thereby avoiding the necessity of using any separate labels or the like.

In the case of the embodiment of the invention illustrated in Figure 2 a similar bag 13 made of netting material is provided with handles 14 in a somewhat different manner.

In this case, the handles 14 are each defined by the looped over end of a length of plastics strapping material 15 which extends down the entire height of the bag to the bottom 16 and is welded thereto along two lines 17. In this case, a separate thin high density polyethylene sheet 18 can be simultaneously fixed to the straps 15 and netting material by the same welds 17 and such a

/sheet 18

sheet 18 is only required on one side of the bag in order to carry the required advertising and identification material printed thereon. Of course, a sheet 18 can be provided on both sides, if required.

It will be understood that numerous variations may be made to the embodiments of the invention described above without departing from the scope hereof. In particular the nature and material of construction of the bag may be varied widely and the method of securing the sheet material to the bag could likewise be varied considerably. In particular, where appropriate, adhesive could be used to secure the sheet material to the netting bag, or, alternatively, stitching could be employed.

The invention therefore provides an effective and useful packaging bag made of netting material which has the features of secure handles and adequate facility for labelling, whilst retaining the advantages associated with netting material.

/CLAIMS

CLAIMS

- A packaging bag made of netting material and wherein a pair of handles are formed at the end thereof having an access aperture, the handles being characterised in that they are defined by region of sheet material extending, in the operative orientation, upwardly from the access opening at the upper end of the bag and whereof integral and other portions of the sheet material are secured to the netting material on each side of the bag to extend down at least a substantial portion of the height of the bag at each side thereof.
- 2. A packaging bag as claimed in claim 1 in which the sheet material extends down substantially the entire height of the bag on each side thereof.
- 3. A packaging bag as claimed in either of claims 1 or 2 in which the sheet material assumes the form of a strap in which each side of the bag

/has two

has two generally parallel spaced strap sections secured thereto.

- 4. A packaging bag as claimed in claim 3 in which a further sheet of material carrying identification or advertising material is secured to at least one side of the bag.
- 5. A packaging bag as claimed in claim 4 in which the further sheet covers the major portion of the straps and space between them.
- 6. A packaging bag as claimed in either of claims

 1 or 2 in which the sheet material is
 relatively wide but narrower than the bag and
 the handles are defined by cut-outs at the
 upper ends of the sheet material which is
 fixed to both sides of the bag.
- 7. A packaging bag as claimed in claim 6 in which a separate sheet is fixed to each side of the bag with the sheets being joined at their upper ends to form the handles and also optionally at their lower ends.

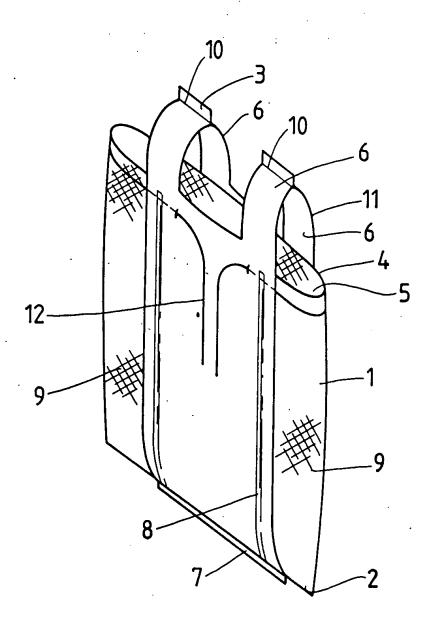
/8. A packaging

- 8. A packaging bag as claimed in any one of the preceding claims in which the sheet material is a plastics film or strap material secured to the netting of the bag along lines extending along the height of the bag.
- 9. A packaging bag as claimed in claim 8 in which the netting material is a plastics material and the sheet material is secured thereto by fusion or welding.
- 10. A packaging bag as claimed in any one of the preceding claims in which the bag is provided with a drawstring for closing the access end of the bag.
- 11. A packaging bag substantially as herein described and exemplified with reference to either of Figures 1 or 2 of the accompanying drawings.

DATED THIS 25TH DAY OF OCTOBER 1993

JOHN & KERNICK

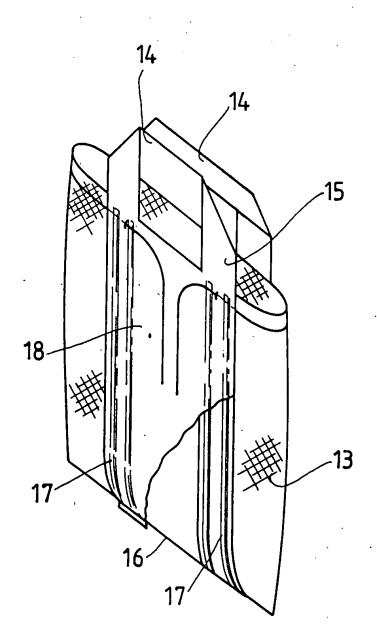
FOR THE APPLICANT



F | G. 1



ن A PATENT APPLICATION NO. 93/7897



F1G. 2

